



MASTER FILE

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DSSD CENSUS 2000 PROCEDURES AND OPERATIONS MEMORANDUM SERIES R-23

MEMORANDUM FOR Dennis Stoudt
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Sample Design Team
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Subject: Accuracy and Coverage Evaluation Survey: Approval and
Summary of Results of the Reduction Sample

I. INTRODUCTION

The Sample Design Team of the Decennial Statistical Studies Division (DSSD) approves the Census 2000 Accuracy and Coverage Evaluation (A.C.E.) reduction sample for release to the persons who need this information to carry out A.C.E. operations. The reduced sample is contained in the output file described in Section III, which should be archived with controlled access only to those who require the file for further A.C.E. operations. Any questions or concerns regarding A.C.E. operational needs should be directed to Magdalena Ramos of the DSSD at 301-457-4295.

The A.C.E. survey will be used as a quality check for Census 2000. Approximately 300,000 housing units will be interviewed in the A.C.E. An independent list of addresses was developed in a sample of block clusters previously selected under the Integrated Coverage Measurement (ICM) 750,000 housing unit design. Results of the listing sample selection are documented in reference 1. One of the steps needed to attain the A.C.E. sample from the ICM sample is the A.C.E. reduction, in which the listing sample block clusters are subsampled. Two succeeding operations, small block cluster subsampling

and large block cluster subsampling, will also be used to obtain the A.C.E. interview sample.

During the A.C.E. reduction, each block cluster was placed into one of several A.C.E. reduction strata. Stratification for each block cluster was based on its estimated demographic characteristics along with the degree of consistency between the census address list housing unit count and the A.C.E. preliminary independent listing count. The version of the census address list used to conduct the reduction was the most recent version available, the January 2000 Decennial Master Address File (DMAF), which included updates from the United States Postal Service Delivery Sequence File for housing units in mailout/mailback areas. A subsample of clusters was selected within each A.C.E. reduction stratum and state.

This memorandum provides summary results of the A.C.E. reduction sample for users to verify the data products they generate using the output file. Any questions or comments regarding the A.C.E. reduction or the sample design in general should be addressed to Deborah Fenstermaker (301-457-4195), James Farber (301-457-4282), or Thomas Mule (301-457-8322) of the DSSD.

II. RESULTS

For the overall United States, 14,765 block clusters and 827,208 housing units are in the A.C.E. reduction sample, plus 559 clusters and 56,074 housing units in Puerto Rico. Note that both the number of clusters and the number of housing units will decrease during small block cluster subsampling and large block cluster subsampling. The final A.C.E. interview sample will consist of approximately 300,000 housing units. The results of the A.C.E. reduction for the initial sampling strata in each state and the nation are summarized in Table 1 in Attachment 1. The number of block clusters and housing units in the listing sample resulted from the listing sample design presented in reference 2. The number of block clusters and housing units in the reduction sample resulted from the A.C.E. reduction sample design specified in reference 3. Small clusters, American Indian Reservation (AIR) clusters, and Puerto Rico clusters are not eligible for the reduction, and thus all such block clusters in the listing sample were retained in the reduced sample. Note that the housing units given in Table 1 are the preliminary number of housing units listed in the A.C.E. independent listing operation, and include all units designated as Future Construction. These numbers were derived from a clerical tally of housing units from the A.C.E. independent listing books. These preliminary independent listing housing unit counts are also used for the totals in listing sample clusters in Table 1. This accounts for the differences between the results in Table 1 and the listing sample results previously provided in reference 1, which were based on early census address list counts.

The design of the A.C.E. reduction is summarized in Table 2. The Minority reduction stratum consisted of all block clusters with a high proportion of a minority group. The Inconsistent strata included block clusters where the preliminary independent listing housing unit count differed from the census count by more than 25 percent, with Low meaning the listing count was lower than the census and High meaning the listing count was higher. The differential sampling factors indicate the degree to which the Minority, Inconsistent Low, and Inconsistent High reduction strata were differentially sampled relative to the Non-Minority Consistent reduction stratum. For example, a differential sampling factor of two for the Minority reduction stratum means that the probability of selection for a cluster in the Minority stratum was twice that of a cluster in the Consistent stratum. Two initial features of the reduction sample design were equal differential sampling factors for the two Inconsistent reduction strata, and equal factors for Medium and Large clusters assigned to the same reduction stratum. However, Table 2 shows that in many states the differential sampling factors differ between the Inconsistent strata or between Medium and Large clusters in the same stratum. This occurred because, to facilitate A.C.E. variance estimation, the probability of selection in each reduction stratum was computed to yield an integer number of expected clusters in sample to avoid random sample size variation. This caused the observed differential sampling factors to deviate from their initially designed values.

Table 3 provides the weights for Medium and Large block clusters in each A.C.E. reduction stratum and state, along with the weights for Medium stratum jumpers. Medium clusters are those that were estimated to contain between 3 and 79 housing units at the time of listing sample selection, while Large clusters were estimated to have 80 or more housing units. Medium stratum jumpers are clusters that were estimated as Medium for the listing sample selection but have 80 or more housing units according to the preliminary independent listing results. These clusters are now Large and thus will undergo large block cluster subsampling, which will increase their weights. To prevent the final weights for these clusters from becoming excessively large, all Medium stratum jumpers were retained in the reduction. Large block cluster subsampling is also the reason that Large clusters generally have much lower weights than Medium clusters within a reduction stratum, as shown in Table 3. The weights for large clusters will increase after large block cluster subsampling, which is designed to minimize weight variation between Medium and Large clusters within each reduction stratum and state. Also, as in Table 2, the weights for the two Inconsistent strata differ within many states due to the probability of selection computation that produced integer cluster sample sizes.

Table 4 presents summary statistics for the three major Types of Enumeration Area, and Table 5 shows A.C.E. Regional Office (ACERO) totals. Note that the results in both of these tables include small block clusters and AIR block clusters and the housing units in these types of clusters.

III. OUTPUT FILES

The description and location of the file containing the A.C.E. reduction sample is given in Attachment 2, which is available only to those persons identified below. For questions regarding access to this file, contact Deborah Fenstermaker at 301-457-4195.

An additional output of the A.C.E. reduction is information for the Field Division (FLD) to optimize their planning for housing unit follow-up. Twelve Lotus spreadsheets, one for each ACERO, will be provided on diskettes to Neala Stevens of the FLD. Puerto Rico will be included in the Boston ACERO spreadsheet. These spreadsheets are named RED_X.WK4, where X is the ACERO abbreviation. Each spreadsheet will contain the following variables in order for each cluster:

- ACERO Abbreviation
- FIPS State Code
- FIPS County Code
- Local Census Office Code
- A.C.E. Cluster Number with Check Digit
- Absolute Difference between the Preliminary Independent Listing Housing Unit Count and the January-updated DMAF Count. (If a cluster is no longer in sample, the count is set to blank on the spreadsheets.)
- A.C.E. Reduction Status
 - 0 = Cluster is no longer in sample
 - 1 = Cluster was retained in sample
 - 2 = Small block cluster whose status will be determined after small block cluster subsampling

Each spreadsheet is sorted by state, county, and A.C.E. cluster number with check digit. **The information contained in these spreadsheets is confidential and protected by Title 13 of the U.S. Code. Access to this information is administratively restricted to authorized A.C.E. staff.**

IV. REFERENCES

1. DSSD Census 2000 Procedures and Operations Memorandum Series R-16, "Accuracy and Coverage Evaluation Survey: Initial Listing Sample Results," June 25, 1999.
2. DSSD Census 2000 Procedures and Operations Memorandum Series R-3, "Accuracy and Coverage Evaluation (ACE) Survey: Block Cluster Sample Specification," March 29, 1999.
3. DSSD Census 2000 Procedures and Operations Memorandum Series R- , "Accuracy and Coverage Evaluation Survey: Reduction Specification," September 15, 1999 DRAFT.

cc:

With Attachment 2:

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DSSD Census 2000 Procedures and Operations Memorandum
Series Distribution List
Statistical Design Team Leaders
A.C.E. Implementation Team
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Table 1: Block Cluster and Preliminary Independent Listing Housing Unit Totals for Listing Sample and Reduced Sample

State	Clusters				Listing Sample				Housing Units				Clusters				Reduced Sample				Housing Units				
	Small	AIR	Medium	Large	Total	Small	AIR	Medium	Large	Total	Small	AIR	Medium	Large	Total	Small	AIR	Medium	Large	Total	Small	AIR	Medium	Large	Total
Alabama	116	0	286	109	511	103	0	8344	19293	27740	116	0	104	43	263	103	0	3495	6803	10201	103	0	3495	6803	10201
Alaska	20	1	190	137	348	34	16	6076	22729	28855	20	1	40	22	83	34	16	1414	3103	4567	34	16	1414	3103	4567
Arizona	86	113	269	180	648	67	2768	8360	47763	58958	86	113	79	61	339	67	2768	2988	17122	22945	67	2768	2988	17122	22945
Arkansas	90	0	353	101	544	60	0	9632	15662	25354	90	0	71	24	185	60	0	2085	3575	5720	60	0	2085	3575	5720
California	184	11	1442	1311	2948	349	204	47044	218883	266480	184	11	528	469	1192	349	204	19048	77194	96795	349	204	19048	77194	96795
Colorado	83	2	293	157	535	41	52	8135	24577	32805	83	2	85	55	225	41	52	2548	8044	10883	41	52	2548	8044	10883
Connecticut	20	0	211	159	390	42	0	5861	23531	29434	20	0	59	47	126	42	0	1682	6708	8432	42	0	1682	6708	8432
Delaware	20	0	243	156	419	21	0	7343	28042	35406	20	0	40	23	83	21	0	1570	2918	4509	21	0	1570	2918	4509
Dist of Columbia	20	0	132	247	399	40	0	4774	47196	52010	20	0	25	31	76	40	0	1437	5266	6743	40	0	1437	5266	6743
Florida	145	0	259	230	635	302	20	7933	47879	56134	145	1	259	230	635	302	20	7933	47879	56134	302	20	7933	47879	56134
Georgia	154	0	220	162	536	281	0	8435	31958	38674	154	0	138	111	403	281	0	3997	20015	24293	281	0	3997	20015	24293
Hawaii	20	0	103	161	284	13	0	3064	41814	44891	20	0	40	75	135	13	0	1202	21855	23070	13	0	1202	21855	23070
Idaho	54	6	312	75	447	46	153	8481	11703	20383	54	6	53	16	129	46	153	1621	2715	4535	46	153	1621	2715	4535
Illinois	185	0	281	140	606	139	0	8534	21512	30185	185	0	247	131	563	139	0	7481	19824	27444	139	0	7481	19824	27444
Indiana	140	0	202	51	393	197	0	6022	8271	14490	140	0	141	46	327	197	0	4129	7447	11773	197	0	4129	7447	11773
Iowa	147	0	242	53	442	279	0	6764	9194	16237	147	0	78	22	248	279	0	2336	3674	6289	248	0	2336	3674	6289
Kansas	193	1	237	63	494	145	27	6527	8753	16452	193	1	70	22	286	145	27	2194	3298	5864	145	27	2194	3298	5864
Kentucky	96	0	268	135	499	167	0	7191	22426	29784	96	0	92	52	240	167	0	2304	9448	11919	167	0	2304	9448	11919
Louisiana	65	0	407	155	627	10	0	11197	23012	34219	65	0	109	50	224	10	0	3324	6480	9814	109	0	3324	6480	9814
Maine	38	1	226	79	344	51	1	5907	10708	16687	38	1	53	16	108	51	1	1438	2018	3508	51	1	1438	2018	3508
Maryland	36	0	177	175	388	38	0	5754	36909	42701	36	0	77	82	195	38	0	3053	18496	19587	38	0	3053	18496	19587
Massachusetts	38	0	229	140	407	117	0	6350	20418	26885	38	0	120	80	238	117	0	3443	11885	15225	117	0	3443	11885	15225
Michigan	122	5	268	104	499	111	148	7990	15749	23998	122	5	227	92	446	111	148	6831	13526	20616	111	148	6831	13526	20616
Minnesota	141	10	208	83	442	142	286	8587	13330	19615	141	10	116	49	316	142	286	3238	7291	10957	142	286	3238	7291	10957
Mississippi	81	3	303	77	484	136	96	8592	11950	20774	81	3	76	25	185	136	96	2454	2850	5536	136	96	2454	2850	5536
Missouri	162	0	200	71	433	384	0	5571	14838	20791	162	0	113	51	326	384	0	3192	11537	15113	326	0	3192	11537	15113
Montana	67	24	333	67	491	28	903	8748	9575	19252	67	24	60	14	165	26	903	1911	1885	4825	26	903	1911	1885	4825
Nebraska	142	3	245	55	445	108	92	6479	7286	13965	142	3	53	13	211	108	92	1549	1188	2937	108	92	1549	1188	2937
Nevada	46	5	225	230	506	5	202	6780	59286	66273	46	5	28	30	109	5	202	1328	8488	10023	5	202	1328	8488	10023
New Hampshire	25	0	201	106	332	61	0	6003	14742	20806	25	0	46	19	90	61	0	1649	2533	4243	61	0	1649	2533	4243
New Jersey	39	0	282	178	499	12	0	8726	27404	36142	39	0	147	103	289	12	0	4876	14881	19769	12	0	4876	14881	19769
New Mexico	108	70	335	136	649	36	1889	9515	23268	34708	108	70	47	19	244	36	1889	1809	2675	6409	36	1889	1809	2675	6409
New York	143	5	603	631	1382	658	93	17995	120239	138885	143	5	271	317	736	658	93	8204	62290	71245	736	93	8204	62290	71245
North Carolina	143	4	236	121	504	394	135	7507	23314	31350	143	4	151	83	391	394	135	5144	18615	24288	391	135	5144	18615	24288
North Dakota	121	12	236	64	433	150	395	5872	7626	14043	121	12	58	17	208	150	395	1356	1491	3392	1491	395	1356	1491	3392
Ohio	132	0	268	133	533	265	0	7903	24304	32472	132	0	230	127	489	265	0	7002	22666	29933	265	0	7002	22666	29933
Oklahoma	142	8	314	101	565	113	267	8845	17230	26455	142	8	89	31	270	113	267	2552	5140	8072	113	267	2552	5140	8072
Oregon	86	3	195	90	374	35	124	5658	14888	20505	86	3	70	44	203	35	124	2163	7195	9517	35	124	2163	7195	9517
Pennsylvania	180	0	427	148	753	232	0	12446	20496	33174	180	0	293	107	580	232	0	8413	14721	23368	232	0	8413	14721	23368
Rhode Island	20	0	256	108	384	14	0	7217	16490	23721	20	0	47	18	85	14	0	1516	2368	3898	14	0	1516	2368	3898
South Carolina	95	0	285	112	492	166	0	9028	20349	29543	95	0	88	39	222	166	0	3536	8482	12184	166	0	3536	8482	12184
South Dakota	108	27	242	57	432	78	471	5935	9390	15874	108	27	55	14	202	78	471	1322	2560	4431	78	471	1322	2560	4431
Tennessee	133	0	285	137	555	473	0	8185	25189	33847	133	0	125	58	316	473	0	3977	9906	14356	473	0	3977	9906	14356
Texas	349	1	1222	681	2253	733	30	36710	146445	189181	349	1	405	238	993	733	30	13501	46698	60962	733	30	13501	46698	60962
Utah	38	7	312	144	501	87	134	10221	24292	34734	38	7	48	23	116	87	134	2472	3957	6850	87	134	2472	3957	6850
Vermont	21	0	201	166	368	32	0	5810	11616	17258	21	0	45	20	86	32	0	1189	3220	4441	32	0	1189	3220	4441
Virginia	98	0	196	166	460	104	0	5378	31377	36859	98	0	131	112	341	104	0	3343	20455	23902	104	0	3343	20455	23902
Washington	73	17	187	120	397	231	439	5647	22201	28518	73	17	106	76	272	231	439	3171	12891	16732	231	439	3171	12891	16732
West Virginia	46	0	189	79	314	47	0	5011	13554	18612	46	0	48	23	115	47	0	1257	4542	5846	47	0	1257	4542	5846
Wisconsin	119	10	211	58	398	233	222	6507	8701	15663	119	10	138	39	306	233	222	4384	5867	1					

Table 2: A.C.E. Reduction Sample Design

State	Sample Size ¹	Differential Sampling Factors							
		Medium				Large			
		Min ²	I Lo ³	I Hi ⁴	Con ⁵	Min	I Lo	I Hi	Con
Alabama	4470	1.75	1.72	1.81	1.00	1.77	1.59	1.59	1.00
Alaska	1800	5.87	3.00	2.57	1.00	6.53	3.54	3.54	1.00
Arizona	4800	1.77	1.70	1.89	1.00	1.73	1.85	1.85	1.00
Arkansas	2610	1.99	2.94	2.86	1.00	1.80	2.47	2.47	1.00
California	33510	2.01	2.98	3.04	1.00	2.00	2.98	2.96	1.00
Colorado	4080	2.01	2.90	2.82	1.00	1.99	2.96	2.96	1.00
Connecticut	3360	2.03	3.31	3.24	1.00	1.96	2.75	2.64	1.00
Delaware	1800	2.96	3.56	3.12	1.00	3.11	3.30	2.89	1.00
Dist of Columbia	1800	1.84	3.37	13.50	1.00	1.79	3.00	4.50	1.00
Florida	15300	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Georgia	7830	2.00	1.98	2.06	1.00	1.99	2.04	2.04	1.00
Hawaii	3750	2.41	4.00	.	1.00	2.07	2.78	2.78	1.00
Idaho	1800	2.86	3.01	2.86	1.00	6.40	3.20	3.20	1.00
Illinois	12360	1.19	1.19	1.19	1.00	1.12	1.12	1.12	1.00
Indiana	6060	1.69	1.69	1.69	1.00	1.17	1.17	1.17	1.00
Iowa	2940	1.80	2.94	2.99	1.00	3.38	3.38	3.38	1.00
Kansas	2700	1.93	2.89	3.00	1.00	2.20	3.30	2.64	1.00
Kentucky	4050	1.93	2.97	3.08	1.00	2.07	3.11	3.11	1.00
Louisiana	4470	1.86	3.05	2.90	1.00	1.83	3.06	2.36	1.00
Maine	1800	6.50	2.84	2.91	1.00	.	2.03	2.71	1.00
Maryland	5280	1.82	2.34	2.41	1.00	1.87	2.43	2.53	1.00
Massachusetts	6300	2.33	2.33	2.33	1.00	2.25	2.25	2.25	1.00
Michigan	10080	1.26	1.26	1.26	1.00	1.18	1.18	1.18	1.00
Minnesota	4860	2.11	2.11	2.11	1.00	1.94	1.94	1.94	1.00
Mississippi	2820	2.01	2.93	2.76	1.00	1.88	2.43	2.43	1.00
Missouri	5580	2.26	2.26	2.26	1.00	1.57	1.57	1.57	1.00
Montana	1800	1.79	3.25	3.03	1.00	3.31	2.84	2.65	1.00
Nebraska	1800	2.32	3.01	2.78	1.00	1.95	2.60	2.93	1.00
Nevada	1800	1.93	2.58	2.49	1.00	1.96	3.06	2.89	1.00
New Hampshire	1800	6.91	2.96	3.07	1.00	.	3.54	2.83	1.00
New Jersey	8340	2.27	2.26	2.22	1.00	2.22	2.15	2.30	1.00
New Mexico	1800	1.73	2.25	1.95	1.00	1.57	1.43	1.67	1.00
New York	18660	1.99	2.97	3.01	1.00	2.00	2.95	3.03	1.00
North Carolina	7740	1.85	1.84	1.89	1.00	1.55	1.55	1.55	1.00
North Dakota	1800	2.21	2.58	3.05	1.00	1.81	3.27	2.72	1.00
Ohio	11490	1.22	1.22	1.22	1.00	1.06	1.06	1.06	1.00
Oklahoma	3420	2.03	3.03	2.89	1.00	2.12	3.11	3.11	1.00
Oregon	3360	1.89	2.86	2.92	1.00	1.94	2.70	2.91	1.00
Pennsylvania	12300	1.70	1.70	1.70	1.00	1.57	1.57	1.57	1.00
Rhode Island	1800	2.88	3.17	2.72	1.00	2.76	2.53	.	1.00
South Carolina	3930	1.58	1.58	1.62	1.00	1.65	1.61	3.63	1.00
South Dakota	1800	1.79	3.33	2.91	1.00	1.87	2.81	3.37	1.00
Tennessee	5580	2.00	2.83	2.89	1.00	1.99	3.06	3.06	1.00
Texas	20280	1.87	2.40	2.39	1.00	1.86	2.39	2.38	1.00
Utah	2160	1.84	2.91	3.29	1.00	1.64	2.74	2.74	1.00
Vermont	1800	7.05	3.20	3.00	1.00	.	2.96	2.54	1.00
Virginia	6960	1.89	1.89	1.89	1.00	1.79	1.79	1.79	1.00
Washington	5850	2.29	2.29	2.29	1.00	1.88	1.88	1.88	1.00
West Virginia	1860	1.73	3.02	3.18	1.00	2.16	3.23	3.23	1.00
Wisconsin	5370	1.75	1.75	1.75	1.00	1.59	1.59	1.59	1.00
Wyoming	1800	2.03	3.17	2.98	1.00	9.80	2.45	2.67	1.00
Puerto Rico	14500	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

. = Not Applicable

¹ Target state housing unit interview sample size, excluding American Indian Reservation sample

² Clusters with high concentrations of minorities

³ Clusters where the Preliminary Independent Listing housing unit count is at least 25 percent lower than the Decennial Master Address File (DMAF) count

⁴ Clusters where the Preliminary Independent Listing count is at least 25 percent higher than the DMAF

⁵ Clusters where the Preliminary Independent Listing count and the DMAF do not differ by more than 25 percent

Table 3: A.C.E. Reduction Block Cluster Weights

State	Medium					Large			
	Min ¹	I Lo ²	I Hi ³	Con ⁴	SJ ⁵	Min	I Lo	I Hi	Con
Alabama	367.42	375.14	356.39	643.85	168.81	61.88	68.75	68.75	109.38
Alaska	56.12	109.80	128.10	329.40	24.40	9.25	17.07	17.07	60.35
Arizona	365.75	380.99	342.89	646.67	142.87	48.24	45.23	45.23	83.60
Arkansas	300.34	203.46	209.27	598.90	87.20	61.17	44.49	44.49	109.92
California	314.21	211.71	207.73	630.83	144.67	53.64	35.94	36.13	107.09
Colorado	325.86	225.95	232.40	655.49	129.11	48.54	32.63	32.63	96.64
Connecticut	301.84	184.88	188.65	611.63	132.06	58.33	41.48	43.21	114.26
Delaware	116.44	97.04	110.62	345.17	29.11	16.97	15.99	18.27	52.79
Dist of Columbia	162.67	88.73	22.18	299.45	22.18	29.41	17.55	11.70	52.65
Florida	491.10	491.10	491.10	491.10	491.10	66.66	66.66	66.66	66.66
Georgia	324.35	328.15	315.84	649.82	287.13	46.95	45.83	45.83	93.57
Hawaii	125.61	75.80	.	303.20	50.53	14.40	10.71	10.71	29.76
Idaho	131.49	125.23	131.49	376.33	43.83	10.32	20.64	20.64	66.04
Illinois	378.75	378.75	378.75	451.51	378.75	74.92	74.92	74.92	83.79
Indiana	321.03	321.03	321.03	541.07	321.03	83.42	83.42	83.42	97.32
Iowa	295.20	180.40	177.12	529.91	147.60	30.15	30.15	30.15	102.03
Kansas	306.86	204.58	197.00	591.00	136.38	47.52	31.68	39.60	104.55
Kentucky	297.29	193.19	186.53	573.59	139.90	46.81	31.20	31.20	96.90
Louisiana	344.14	210.00	221.06	640.50	110.53	59.30	35.54	45.99	108.59
Maine	76.08	173.91	170.07	494.55	76.08	.	47.64	35.73	96.72
Maryland	351.86	274.16	266.10	641.05	193.53	50.88	39.12	37.57	95.01
Massachusetts	249.46	249.46	249.46	581.07	249.46	50.35	50.35	50.35	113.28
Michigan	379.94	379.94	379.94	477.30	379.94	74.10	74.10	74.10	87.37
Minnesota	241.75	241.75	241.75	509.72	241.75	45.24	45.24	45.24	87.96
Mississippi	328.84	225.49	239.59	660.55	98.65	62.98	48.76	48.76	118.41
Missouri	288.57	288.57	288.57	652.42	288.57	69.36	69.36	69.36	108.99
Montana	180.03	99.02	105.90	321.39	36.01	16.22	18.93	20.28	53.74
Nebraska	232.80	179.08	194.00	539.87	89.54	46.85	35.14	31.24	91.48
Nevada	338.80	254.10	263.51	655.01	56.47	38.63	24.83	26.21	75.87
New Hampshire	65.09	151.89	146.46	450.00	65.09	.	23.34	29.17	82.59
New Jersey	287.86	290.05	295.22	654.24	248.61	53.18	54.86	51.43	118.20
New Mexico	381.66	293.88	338.41	661.23	53.43	58.44	64.07	54.92	91.53
New York	324.01	217.28	213.80	644.39	203.11	49.35	33.38	32.45	98.46
North Carolina	350.78	352.28	343.47	647.63	305.31	68.13	68.13	68.13	105.53
North Dakota	91.15	78.13	66.11	201.33	.	16.99	9.44	11.33	30.84
Ohio	381.75	381.75	381.75	465.12	381.75	77.63	77.63	77.63	82.24
Oklahoma	315.93	211.70	222.29	641.46	127.02	51.58	35.17	35.17	109.41
Oregon	347.89	229.38	224.79	656.02	160.56	53.73	38.58	35.82	104.35
Pennsylvania	310.91	310.91	310.91	529.03	310.91	66.91	66.91	66.91	105.29
Rhode Island	122.17	110.87	129.35	351.84	43.12	24.39	26.60	.	67.25
South Carolina	409.62	409.11	399.76	647.14	147.28	65.49	66.98	29.77	108.10
South Dakota	128.60	69.25	79.14	230.44	39.57	19.47	12.98	10.81	36.50
Tennessee	326.22	231.32	225.85	653.55	195.73	55.04	35.78	35.78	109.38
Texas	347.97	271.29	272.01	650.58	144.69	48.25	37.50	37.73	89.69
Utah	268.30	169.92	150.25	494.44	53.66	52.91	31.74	31.74	86.92
Vermont	35.25	77.55	82.94	248.42	.	.	15.07	17.58	44.57
Virginia	275.31	275.31	275.31	520.44	275.31	42.15	42.15	42.15	75.62
Washington	252.64	252.64	252.64	577.47	.	48.59	48.59	48.59	91.36
West Virginia	380.24	217.28	206.42	656.37	108.64	48.78	32.52	32.52	105.19
Wisconsin	285.07	285.07	285.07	499.60	285.07	61.95	61.95	61.95	98.73
Wyoming	96.58	61.81	65.81	195.91	19.32	3.71	14.85	13.61	36.37
Puerto Rico	92.63	92.63	92.63	92.63	92.63	16.56	16.56	16.56	16.56

. = Not Applicable

¹ Clusters with high concentrations of minorities

² Clusters where the Preliminary Independent Listing housing unit count is at least 25 percent lower than the Decennial Master Address File (DMAF) count

³ Clusters where the Preliminary Independent Listing count is at least 25 percent higher than the DMAF

⁴ Clusters where the Preliminary Independent Listing count and the DMAF do not differ by more than 25 percent

⁵ Clusters initially classified as Medium for listing sample selection that have 80 or more Preliminary Independent List housing units

Table 4: A.C.E. Reduction Summary Statistics by Major Type of Enumeration Area

Type of Enumeration Area ¹	Block Clusters	Housing Units ²
Block Canvassing	9074	682859
Address Listing	5271	138539
List/Enumerate	420	5810
Total	14765	827208
Puerto Rico ³	559	56074

¹ These are major types of enumeration area (TEAs) and are collapsed over the detailed TEAs based on the methodology used to compile the census address list. Block Canvassing includes TEA 1 (Mailout/Mailback), TEA 6 (Military), TEA 7 (Urban Update/Leave), and TEA 8 (Urban Update/Enumerate). Address Listing includes TEA 2 (Update/Leave), TEA 5 (Rural Update/Enumerate), and TEA 9 (Mailout/Mailback to Update/Leave Conversion). List/Enumerate includes TEA 3 (List/Enumerate).

² Preliminary Independent Listing Housing Units

³ Puerto Rico was entirely address listed. The Address Listing counts above do not include Puerto Rico.

Table 5: A.C.E. Reduction Summary Statistics by A.C.E. Regional Office

A.C.E. Regional Office	Block Clusters	Housing Units ¹
Boston ²	1649	112321
New York	541	67756
Philadelphia	1061	60963
Detroit	1050	56395
Chicago	1196	49903
Kansas City	1631	51815
Seattle	1088	68237
Charlotte	1510	86649
Atlanta	1301	90628
Dallas	1402	76312
Denver	1969	75324
Los Angeles	926	86979
Total	15324	883282

¹ Preliminary Independent Listing Housing Units

² Includes Puerto Rico block clusters and housing units